16 PORT 10/100/1000M 802.3af/at POE + 4 PORT 1000M SFP MANAGED SWITCH:
(KL-S16P2S-GE)

DESCRIPTION:

The KL-S16P2S-GE is a L2+ managed PoE fiber switch independently developed by EWIND. It has 16*10/100/1000Base-T RJ45 ports and 2*100/1000Base-X SFP fiber slot ports. Port 1-16 can support IEEE 802.3af/at standard PoE power supply. Single port PoE power reaches 30W, and the maximum PoE output power is 250W. As a PoE power supply device, it can automatically detect and recognize the power receiving equipment that meets the standard and supply power through the network cable. It can supply power to POE terminal equipment such as wireless AP, webcam, VoIP phone, building visual access control intercom, etc. through a network cable to meet the network environment that needs high-density PoE power supply. It is suitable for hotel, campus, park, commercial supermarket, scenic spot, factory quarter and SMB small and medium-sized enterprises to form a cost-effective network.

The KL-S24P4CM-GE has L2+ full network management function, supports IPV4/IPV6 management, supports static route full line rate forwarding, supports complete security protection mechanism, complete ACL/QoS policy and rich VLAN functions, and is easy to manage and maintain. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and (ITU-T G.8032) ERPS to improve link backup and network reliability. When one-way network fails, communication can be quickly restored to ensure important uninterrupted communication for applications. According to the actual application requirements, you can configure multiple application services such as PoE power management, port traffic control, VLAN division, and SNMP through the Web network management mode.

PRODUCT DETAILS:

- 16*RJ45 10/100/1000M + 2*1000M SFP Port PoE Switch,1-16 ports support IEEE 802.3af/at;
- PoE port support AF/AT intelligent recognition. Standard power is 15.4W/port, Maximum power: 30W/port;
- Only support 1,2(+)/3,6(-);
- Support QOS, STP/RSTP, IGMP, DHCP, SNMP, WEB, VLAN, ERPS etc.;
- Switching capacity:56Gbps, MAC table:8K;
- POE port can be real-time network management, timed on/off, can force POE working mode, real-time display of POE port power;
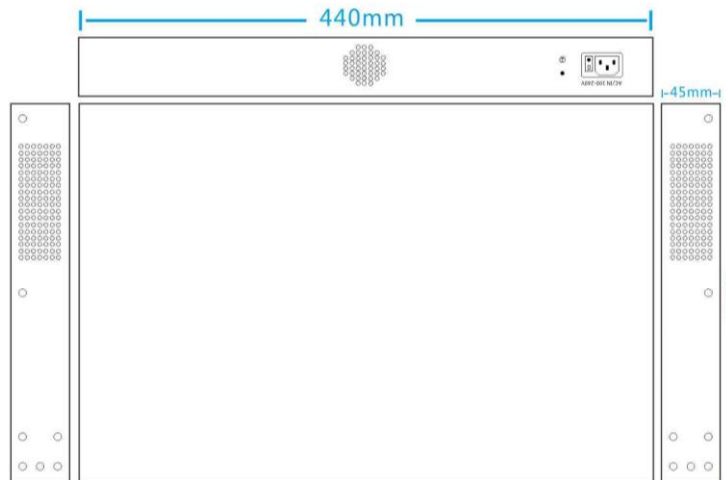- Compatible with 1U rack, built-in internal power adapter;

TECHNICAL SPECIFICATIONS:

Model	KL-S16P2S-GE
Fixed Port	16*10/100/1000Base-T PoE ports (Data/Power) 2*100/1000Base-X uplink SFP slot ports 1 * RS232 console port (115200, N,8,1)
Ethernet Port	10/100/1000Base-T(X), auto-sensing, Full/half duplex MDI/MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤100 meter) 100BASE-TX: Cat5 or later UTP (≤100 meter) 1000BASE-T: Cat5e or later UTP (≤100 meter)
SFP Slot Port	Gigabit SFP optical fiber interface, default matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Optical Cable	Multi-mode: 850nm 0 ~ 550M, single mode: 1310nm 0 ~ 40KM, 1550nm 0 ~ 120KM.
Network Management Type	L2+
Network Protocol	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u 100Base-TX; IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X IEEE802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	256Gbps (Non-blocking)
Forwarding Rate@64byte	26.78Mpps
MAC	8K
Buffer Memory	6M
Jumbo Frame	9.6K
LED Indicator	Power: PWR (green), system: SYS (yellow), network: Link (yellow), fiber port :L/A (green), PoE: PoE (green), rate: Speed (green)
Reset Switch	Yes, One-button factory reset
PoE Port	Port 1 to 16 IEEE802.3af/at @ POE
PoE Management	Total power limit of PoE power supply PoE output power allocation, off& af &at PoE output priority configuration PoE working status Delay start of power supply Scheduling of PoE operation and time
Power Supply Pin	Default 1/2 (+), 3/6 (-)
Max Power Per Port	30W; IEEE802.3af/at
Total PWR / Input Voltage	250W (AC100-240V)
Power Consumption	Standby<16W, Full Load<240W
Power Supply	Built-in power supply, AC 100~240V 50-60Hz 4.1A

Operation TEMP / Humidity	-20~+55°C, 5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+75°C, 5%~95% RH Non condensing
Dimension (L*W*H)	440*290*44.5mm
Net /Gross Weight	<4.2kg / <4.7kg
Installation	Desktop, 19-inch 1U cabinet
Lightning protection / protection level	Lightning protection: 4KV 8/20us; Protection level: IP30
Warranty	3 years.
Interface	IEEE802.3X (Full-duplex) Port temperature protection setting Port green Ethernet Energy-saving setting Broadcast storm control based on port speed The speed limit of the message flow in the access port. The minimum particle size is 64Kbps.
Layer 3 Features	L2+ network management, IPV4/IPV6 management L3 soft routing forwarding, Static route, Default route @ 128 pcs, APR @ 1024 pcs
VLAN	4K VLAN based on port, IEEE802.1q VLAN based on the protocol VLAN based on MAC Voice VLAN, QinQ configuration Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP, Static aggregation Max 9 aggregation groups and 8 ports per group.
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
Industrial Ring Network Protocol	G.8032 (ERPS), Recovery time less than 20ms 250 Ring at most, Max 254 devices per ring.
Multicast	MLD Snooping v1/v2, Multicast VLAN IGMP Snooping v1/v2, Max 250 multicast groups, Fast log out
Port Mirroring	Bidirectional data mirroring based on port
QoS	Flow-based Rate Limiting Flow-based Packet Filtering 8*Output queues of each port 802.1p/DSCP priority mapping Diff-Serv QoS, Priority Mark/Remark Queue Scheduling Algorithm (SP, WRR, SP+WRR)
ACL	Port-based Issuing ACL, ACL based on port and VLAN L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.
Security	IP-MAC-VLAN-Port binding ARP inspection, Anti-DoS attack AAA & RADIUS, MAC learning limit Mac black holes, IP source protection IEEE802.1X & MAC address authentication Broadcast storm control, Backup for host datum SSH 2.0, SSL, Port isolation, ARP message speed limit User hierarchical management and password protection

DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
Management	One-key recovery Cable Diagnose, LLDP Web Management (HTTPS) NTP, System work log, Ping Test CPU instant utilization status view Console/AUX Modem/Telnet/SSH2.0 CLI Download & Management on FTP, TFTP, Xmodem, SFTP, SNMP V1/V2C/V3 NMS - smart network management system platform (LLDP+SNMP)
System	Category 5 Ethernet network cable Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later; TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network

DIMENSIONS: